Amendments to the Specification:

On page 2, please replace the first paragraph with the following amended paragraph:

In one aspect, debugging code includes selecting targets running on different processors at a target ~~sit~~site, associating each target with a session and the session with a symbol table, and using the session to direct debugger information to the target with which the session is associated.

On page 2, please replace the fourth paragraph with the following amended paragraph:

The present invention provides a mechanism that allows the same interface to be used to control multiple debug sessions, and also allows the same session to be used to support more than one target, that is, targets that have a common symbol table. Thus, the debugger does not need to maintain separate symbol tables and establish separate sessions for targets that have the same symbol table. These optimizations enable more efficient switching between multiple active heterogeneous targets, as well as reduce the amount of memory and processing overhead associated with the use of symbol tables by a debugger tool that handles debug sessions with multiple active targets.

On pages 5 and 6, please replace the last paragraph starting on page 5 with the following amended paragraph:

Referring to FIG. 3, a multi-session environment 60 in which GDB optimized for a multiprocessor system and target switching between targets on different processors in a multiprocessor configuration is shown. In an exemplary implementation, there are four targets 46a through ~~46b~~46d, each corresponding to a different one of the processors 30 (shown in FIG. 1). Each target includes a binary file. More specifically, target 46a includes binary file "A.BIN" ~~62a~~48a, target 46b includes binary file "B.BIN" 48b and targets 46c and 46d include copies of "C.BIN" ~~62c~~48c. Thus, it can be seen that targets 46c and 46d, collectively identified by reference numeral 64, run the same code. The user interface 28 includes a session setup

component 62 that sets up a different GDB session for each group of one or more targets that uses a different symbol table. Thus, for the exemplary configuration shown in FIG. 3, the component 62 creates a first GDB session 26a for a first target, target 46a, a second GDB session 26b for a second target, target 46b, and a third GDB session 26c for targets 46c and 46d that run the same code and therefore have a common symbol table. Each session uses a different symbol table, the symbol table that corresponds to the binary code of the target or target group with which that session is associated. In the example shown, therefore, the session 26a maintains and uses a first symbol table "A.ELF" 52a which corresponds to the binary file "A.BIN" 48a of target 46a. Likewise, the session 26b maintains and uses a second symbol table "B.ELF" which corresponds to the binary file "B.BIN" 48b of target 46b. The third session 26c maintains and uses a third symbol table "C.ELF" which corresponds to the binary file "C.BIN" 48c of the target group 64 (that is, targets 46c and 46d). Thus, the creation of debug session provides for a one-to-one correspondence between symbol tables and associated binary files (e.g., A.ELF and A.BIN). For a given debug command (e.g., set tracepoint in line 22 of source file 'xx.c', or show var 'y' in source file 'xx.c'), a session uses its symbol table to determine the correct address in the target code.

One page 7, please replace the first full paragraph with the following amended paragraph:

In another embodiment, as shown in FIG. 4, the data processing system 14 includes at least one host system 70 connected to a data storage system 72. The data storage system 72 receives data and commands from, and delivers data and responses to, the host computer ~~72~~70. The data storage system 72 is a mass storage system having a controller 74 coupled to pluralities of physical storage devices 76 such as disk devices, as well as the host system 70. The data storage system 72 can be, for example, that made by EMC and known as the Symmetrix data storage system.